



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,425	09/22/2003	Seiji Mishima	02910.000080	6516
5514	7590	03/23/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PERT, EVAN T	
		ART UNIT	PAPER NUMBER	
		2826		

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/665,425	MISHIMA, SEIJI	
	Examiner Evan Pert	Art Unit 2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) 1-19 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1203.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The specification contains numerous grammatical informalities, understandably related to translational aspects of the Japanese priority documents. While applicant may choose any style for a US patent application, the style of choice should be grammatically proper throughout, in English, for the highest quality patent definitely in compliance with 37 CFR 1.71.

Furthermore, the specification contains significant portions of text where individual words are spaced exceedingly tightly together, which may lead to difficulties during the publication phase.

Applicant is required to review and correct the specification, and submit a substitute specification, suitable for printing as a quality patent, in response to this Office Action.

While the examiner acknowledges that the specification is generally understandable and well written, the informalities, if unchanged before printing as a US patent, could lead to a patent needing a Certificate of Correction, for example.

### ***Claim Objections***

3. Claims 1-19 are objected to because of grammatical informalities consistent with informalities of the specification. Appropriate correction is required:

As an example, to expedite prosecution, the examiner presents an appropriately amended claim 1, among possible acceptable corrections:

Claim 1 (Grammatically Proper Example). A method for manufacturing an electron source substrate configured to be arranged to confront an anode member with a spacer in between the anode member and the electron source substrate, comprising the steps of:

    forming a plurality of electrode pairs over the electron source substrate;

    forming a conductive film between each of the plurality of electrode pairs by applying liquid droplets containing a conductive substance between electrode pairs using a plurality of ink jet devices; and

    forming an electron emission portion in each of the conductive films between each of the plurality of pairs of electrodes,

    wherein, at a time of application of the liquid droplets, at least for electrode pairs arranged in the vicinity of the intended spacer location, a different kind of ink jet device is used than is used for the electrode pairs not in the vicinity of the intended spacer location.

***Allowable Subject Matter***

4. Claims 1-19 are objected to for grammatical informalities, but are otherwise allowable.
5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose applicant's claimed methodology, particularly characterized by the use of "different kinds" or "a plurality of kinds" (i.e. different tolerances) of ink-jet devices in manufacturing an electron source substrate [genus claims 17-19], especially beneficial in the context of "in the vicinity of spacer" [e.g. claims 1-10] or "at the central portion of a screen" [e.g. claims 11-16].

Applicant has recognized particular manufacturing advantages not disclosed in the prior art; for example, in using lower tolerance ink-jet devices for forming elements in certain parts of a display as compared to other parts, throughput and efficiency is increased.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Nishikawa and Sakamaki et al. are cited as relevant for disclosure of ink-jet devices in making electron source substrates, but they don't suggest using different (or a plurality) of kinds of ink-jet devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan Pert whose telephone number is 571-272-1969. The examiner can normally be reached on M-F (7:30AM-3:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2826

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ETP  
March 18, 2005

  
**EVAN PERT**  
**PRIMARY EXAMINER**